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APPLICANT : SHIN ETSU CHEM CO LTD;

INVENTOR : TOMIYOSHI KAZUTOSHI;

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TITLE : FLAME-RETARDANT EPOXY RESIN COMPOSITION FOR SEMICONDUCTOR  
SEALING AND SEMICONDUCTOR DEVICE

ABSTRACT : PROBLEM TO BE SOLVED: To obtain a flame-retardant epoxy resin composition free of a bromine compound for semiconductor sealing, and to provide a semiconductor device sealed by the cured composition.

SOLUTION: This flame-retardant epoxy resin composition for semiconductor sealing is composed of, as the essential components, (A) an epoxy resin, (B) a phenol resin, its phenolic hydroxyl group accounting for 0.5 to 1.6 mols per mol of the epoxy group in the component A, (C) an inorganic filler, accounting for 550 to 1,000 pts.wt. per 100 pts.wt. of the total quantity of the components A and B, (D) powdered antimony pentoxide produced by the sol-gel process, accounting for 0.5 to 20 pts.wt. per 100 pts.wt. of the total quantity of the components A and B, and (E) a cured or uncured organopolysiloxane accounting for 0.1 to 10 pts.wt. per 100 pts.wt. of the total quantity of the components A and B, and contains no bromine compound. The epoxy resin composition gives the cured composition which simultaneously shows flame retardancy and heat-resistance even without incorporating any bromine compound, making the other objective semiconductor device sealed by the cured composition reliable.

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